

AMENDMENT AND RESPONSE

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Serial No.: 09/990,330

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Attorney Docket No. 125.009US01

Title: A LATERAL MOSFET STRUCTURE OF AN INTEGRATED CIRCUIT HAVING
SEPARATED DEVICE REGIONS (Amended Title)

IN THE SPECIFICATION

Please amend the title as follows:

~~Self Alignment of Separated Device Regions in a~~ A lateral MOSFET Structure of an Integrated
Circuit having separated device regions.

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Please amend Paragraph 42 as follows:

[0042] In particular, with current production processes, the edge of the drain region 51 is defined by the location of an edge of an opening in a photo resist mask that serves to define where the drain region 51 is formed in the substrate 49. Similarly, the edge of the top gate 53 is also defined by the location of an opening in another photo resist mask that defines the location of the formation of the top gate 53. These two masks are aligned to a previous formed reference pattern. Thus there are two alignment uncertainties between the edges of the photo resist masks that define the edge of the drain region 51 and the edge of the top gate region 53. Using projection aligners to perform the alignment of each of the photo resist masks to the previously formed reference pattern, a sigma deviation from design location of the mask edge might be as high as 0.75×10^{-6} micron. Since, the alignments of the drain region 51 and the top gate 53 are independent, the 1 sigma deviation from the nominal space between their edges in this example would be: $[(0.75)^2 \Delta_2 + (0.75)^2 \Delta_2]^{0.5} \Delta 0.5 = 1.06 \times 10^{-6}$ microns.